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TERMINAL ISLAND  
TREATMENT PLANT

445 Ferry Street  
San Pedro, CA 90731  
(310) 548-7520  
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Ms. Lauren Fondahl, Biosolids Coordinator  
U.S. EPA - Region IX (W-5-2)  
75 Hawthorne Street  
San Francisco, CA 94105

Dear Ms. Fondahl:

## CITY OF LOS ANGELES' TERMINAL ISLAND WASTEWATER TREATMENT PLANT 1998 BIOSOLIDS ANNUAL REPORT

On behalf of the City of Los Angeles, Bureau of Sanitation, I am sending the enclosed 1998 Biosolids Annual Report for Terminal Island Wastewater Treatment Plant. This satisfies the generator reporting requirements in accordance with the U.S. EPA 40 CFR Part 503 Sewage Sludge Regulations.

If you have any questions, please contact Y.J. Shao of my staff at (310)548-7520.

Sincerely,

  
CLARENCE C. MANSELL, JR., Plant Manager III  
Terminal Island Treatment Plant

CCM/PA/nah

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**1998 ANNUAL REPORT  
FOR  
THE CITY OF LOS ANGELES TERMINAL ISLAND  
WASTEWATER TREATMENT PLANT  
IN COMPLIANCE WITH USEPA 40 CFR PART 503 SEWAGE SLUDGE  
REGULATIONS REPORTING REQUIREMENT**

**SUBMITTED TO**

**Lauren Fondahl, Biosolids Coordinator  
U.S. Environmental Protection Agency  
Region 9**

**February 1999**

**PROGRAM STAFF**

**Bureau of Sanitation  
Clarence C. Mansell Jr., Plant Manager III  
Y.J. Shao, Plant Manager I**

**PREPARED BY**

**Bureau of Sanitation  
Department of Public Works  
City of Los Angeles**

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## **SECTION 1**

### **BACKGROUND INFORMATION**

The City of Los Angeles, Department of Public Works, Bureau of Sanitation operates four wastewater facilities (Hyperion and Terminal Island Treatment Plants and Donald C. Tillman and Los Angeles Glendale Water Reclamation Plants) within a 600 square mile service area that includes four million people and 29 contracting cities and agencies. The Hyperion Treatment Plant (HTP) receives and processes flow from its service area and from the two water reclamation plants while the Terminal Island Treatment Plant (TITP) processes flow from its independent service area. Together, the four facilities process an average of 473 million gallons per day of wastewater and produce 188 dry metric tons per day of biosolids. All of the biosolids are beneficially used.

Thus, the City of Los Angeles must comply with the standards of the United States Environmental Protection Agency (USEPA) 40CFR Part 503 Sewage Sludge Regulations. The following are the reports requirements:

#### **Preparer to Others:**

General Information was provided to land applier, and composter as stated in Section 503.12(d), (f) and (g).

#### **Preparer to USEPA Region 9:**

The Terminal Island Treatment Plant is required to report the information in Section 503.18 for preparer of biosolids. The information includes the submittal of information in section 503.17(a)(5)(i)(A) through (D) from January 1998 through December 1998.

#### **Deriver to USEPA Region 9:**

The Terminal Island Treatment Plant is not required to provide the information in Section 503.17(a)(2)(i) through (iv) for composting facilities, because the treatment plant did no composting in 1998. The City's contractor, San Joaquin Composting Inc., will report this information directly to USEPA Region 9.

### **Beneficial uses and distribution of biosolids**

From January 1998 to December 1998 biosolids generated by TITP were 100% beneficially used as soil amendment to grow feed and fiber crops and an organic ingredient in the production of compost. Table 1 presents the distribution of biosolids among its beneficial use options.

Table 1 - Percent distribution of biosolids to beneficial use options

<b>Beneficial Use Options</b>	<b>Dry Metric Tons</b>	<b>% of Use</b>
Soil Amendment (land application)	1,841	56
Compost	1,447	44
Total	3,288	100

Facility information for Preparer, land applier, and composter is provided in Appendix A.

## **SECTION 2**

### **PREPARER (distributed to land applier and composter)**

Section 503.12 (d) (f) and (g) (general requirements) states that the preparer shall provide information to the applier/composter to allow the applier/composter (deriver) to comply with the requirements.

Section 503.18 (reporting) requires the following information in Section 503.17 (a)(5)(i)(A) through (D) for Terminal Island from January 1998 through December 1998 to be submitted to the permitting authority on February 19, 1999.

#### **Information Provided to others [503.12 (d), (f) and (g)]**

All the information under Section 503.17 (a)(5)(i)(A) to (D) for the Terminal Island biosolids was provided to land appliers Biogro System and Gardner - Arciero and San Joaquin Composting, Inc. Other information was supplied as requested.

#### **Pollutant Concentrations [503.17 (a)(5)(i)(A)]**

Section 503.16 (frequency of monitoring) requires TITP to monitor pollutant concentrations in biosolids on a bimonthly basis. However, TITP biosolids are analyzed monthly for all ten metals.

The results are summarized as follows:

- All TITP metals concentrations were below Table 1 ceiling concentration limits of Section 503.13.
- All TITP metals concentrations remained below Table 3 of Section 503.13.

Refer to Appendix B for the detailed, analytical test results and methods for TITP pollutant concentrations.

The biosolids samples are prepared by the appropriate digestion and extraction procedures described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 3rd edition, U.S. EPA, 1986 with Revisions up to 1992.

**Certification Statement, Pathogen Reduction (PR) and Vector Attraction Reduction (VAR)  
[503.17 (a)(5)(i)(B) to (D)]**

Refer to Appendix C for the certification statements containing descriptions of PR and VAR for TITP biosolids.

All TITP material complied with Class B requirements for PR and VAR.

## **APPENDIX A**

### **Facility Information for Preparer, Land Applier, and Composter**



## **BIOSOLIDS PREPARER FACILITY INFORMATION**

### **TERMINAL ISLAND TREATMENT PLANT - PREPARER OF BIOSOLIDS:**

City of Los Angeles  
Department of Public Works  
Bureau of Sanitation  
Terminal Island Treatment Plant

Clarence C. Mansell, Jr., Plant Manager III  
445 Ferry Street  
San Pedro, CA 90731

NPDES Number: CA0053856

## **BIOSOLIDS LAND APPLIER FACILITY INFORMATION**

1. Biogro System  
19600 Fairchild Road, Suite 120  
Irvine, CA 92715

Mark Taylor, General Manager  
Telephone: (800)285-2479  
FAX: (714)476-8614

2. Gardner - Arciero  
P.O. Box 277  
Buellton, CA 93427

Slick Gardner, General Manager  
Telephone: (805)688-4922  
FAX: (805)688-8742

**BIOSOLIDS DERIVER FACILITY INFORMATION (composter)**

San Joaquin Composting Inc.  
525 N. Shafter Ave  
Shafter, CA 93263-1505

Scott Deatherage, General Manager  
Telephone: (805)746-7623  
FAX: (805)746-0155

## **APPENDIX B**

### **Terminal Island Treatment Plant' Analytical Test Results of Metals Concentrations for Preparer**

Table 3. BENEFICIAL USE ASSESSMENT OF BIOSOLIDS AT TERMINAL ISLAND TREATMENT PLANT  
The concentrations are in mg/kg of dry weight  
12 Month Trend

Mo/Yr	pH	%TS	As	Cd	Cr	Cu	Mo	Pb	Hg	Ni	Se	Zn
			3050# 7061##	3050# 6010##	3050# 6010##	3050# 6010##	3050# 6010##	3050# 6010##	7471# 7471##	3050# 6010##	3050# 7740##	3050# 6010##
DEC98	7.9	14.9	7.3	3.96	40	259	29.0	60	2.35	39.8	65.1	952
NOV98	7.4	18.1	5.5	4.33	35	250	30.2	58	1.44	37.6	46.5	992
OCT98	7.8	17.2	7.1	5.47	33	279	32.0	55	2.09	29.6	64.3	1259
SEP98	8.1	16.5	5.4	5.21	34	305	28.7	45	1.70	33.8	82.4	921
AUG98	8.0	24.4	1.8	6.15	39	270	37.6	60	1.61	35.3	91.0	910
JUL98	8.4	25.0	10.0	6.13	43	259	30.9	57	1.33	38.4	94.5	909
JUN98	8.2	24.1	9.6	5.89	41	247	19.9	65	1.98	37.7	53.1	983
MAY98	8.2	25.0	4.6	5.69	36	269	17.9	56	4.69	44.5	51.7	958
APR98	7.9	24.0	8.1	5.83	49	268	19.0	73	2.83	47.5	63.3	963
Mar98	6.9	26.9	8.5	4.54	42	279	19.8	71	2.21	46.1	66.2	848
Feb98	8.5	24.6	5.9	3.54	33	276	20.4	62	1.41	40.7	76.0	744
Jan98	8.4	18.9	7.0	3.30	26	261	19.2	57	2.00	27.7	68.9	746
AVG	8.0	21.6	6.7	5.00	38	269	25.4	60	2.10	38.2	68.6	932
MAX	8.5	26.9	10.0	6.15	49	305	37.6	73	4.69	47.5	94.5	1260
MIN	6.9	14.9	1.8	3.30	26	247	17.9	45	1.33	27.7	46.5	744
Ceiling Conc.*			75	85	***	4300	75	840	57	420	100	7500
Pollutant Conc**			41	39	***	1500	****	300	17	420	100	2800

### Sample preparation and analytical methods, respectively, are adopted from EPA SW-846, 3rd Edition, 1986

\* Ceiling Concentrations in Table 1 of EPA Part 503 sludge regulation.

\*\* Pollutant Concentration in Table 3 of EPA Part 503 sludge regulation.

\*\*\* Limit was deleted according to Federal Register vol. 60, No. 206 of Oct. 25, 1995.

\*\*\*\* Pending for EPA's reconsideration.